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*Welcome to the January issue of the **Oil and Gas Update**, the newsletter that provides training and activity updates related to oil and gas development in the Northwest Territories. This newsletter is published bi-monthly by the Department of Education, Culture and Employment in partnership with the Department of Resources, Wildlife and Economic Development, Government of the Northwest Territories.*

## MACKENZIE VALLEY PIPELINE UPDATE

In the 1970's, significant reserves of natural gas were discovered in the Mackenzie Delta area of the Northwest Territories. After many years of uncertainty, the owners of the largest of these gas fields (Imperial Oil, ConocoPhillips, ExxonMobil and Shell) signed a memorandum of understanding with the Aboriginal Pipeline Group (APG) in 2001 to jointly construct and own a 1300km pipeline along the Mackenzie Valley to carry the gas to southern markets.

This pipeline proposal is called the Mackenzie Gas Project (MGP). For the past year, the MGP has been involved in the Project Definition Phase. This Phase is expected to last three to four years at a cost of \$250 million and includes public consultation, technical studies, environmental field work, benefit plans and regulatory review. Much of this work is already taking place and the MGP has set up regional offices in Fort Simpson, Norman Wells and Inuvik to improve communications with local residents.

Despite this progress, the APG is still not a full-participant in the project. To

maintain its one-third ownership position, the APG must contribute \$70 million during the Project Definition Phase. However Fred Carmichael, president of the APG, recently announced that a financing agreement may be near and that it may involve support from the private sector rather than government.

If the project moves forward as scheduled, the MGP expects to submit full pipeline applications to the appropriate regulatory agencies by the end of 2003. Currently, authorities are working on procedures to coordinate the regulatory process but the full review is still expected to last two to three years.

Only once the regulatory process is complete will a decision be made on whether to proceed with the construction of the \$4 billion pipeline. According to published reports, construction will be concentrated during three winter seasons and over 5000 person years of direct employment will be created. Natural gas from the Mackenzie Delta could start to flow by 2008, with the pipeline in operation for 25+ years.

# OIL AND GAS UPDATE



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## HUMAN RESOURCES STUDY OF THE UPSTREAM PETROLEUM INDUSTRY



Petroleum  
Human Resources  
Council of Canada

Conseil canadien des  
ressources humaines  
de l'industrie du pétrole

The Petroleum Human Resources Council of Canada (Petroleum Council) is conducting a national human resources study of the upstream petroleum industry. The primary goal of this study is to provide an analysis of the workforce (demographics, skills, supply and demand) and an assessment of the human resource challenges faced by industry over the next decade.

Many of the opportunities and threats defined by industry stakeholders have direct implications for human resource practices:

- evolving economic, business and regulatory environment
- current and future skill supply and demand
- effectiveness of current attraction, recruitment, training, development and retention practices
- shifting skill sets within occupations
- impact of technology

The study will examine the impact of technology and the business environment on issues such as future employment, occupational structure, skill levels, labour supply and training needs.

Some of the expected outcomes include:

- A human resources plan for the industry which will address critical issues to build a platform for future industry growth, and sustainable, attractive employment.
- Strategies to improve the attractiveness of the industry to potential entrants and to increase the retention rates in areas of skill shortage.
- Practices to attract and train non-traditional employment groups (women, urban youth, immigrants, and Aboriginal people) to address the supply issue.

- Knowledge of the skills and competencies required by the industry to provide a basis for skill assessment and development processes.
- Recommendations to augment industry related education to improve the responsiveness of the education system to the future needs of the industry.

The anticipated completion date for the study is **September 2003**. For the latest developments, please visit [www.petrohrsc.ca](http://www.petrohrsc.ca).

Newsletters highlighting study developments will be sent to industry stakeholders through the course of the study. If you would like to be added to the mailing list for these updates, please email [jlevesque@petrohrsc.ca](mailto:jlevesque@petrohrsc.ca). For more information about this study, please contact:

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(403) 537-1230  
*The Petroleum Human Resources Council of Canada was formed in 2001 when industry leaders initiated a partnership with Human Resources Development Canada (HRDC). The mandate is to support the upstream petroleum industry in its need to ensure the availability of skilled human resources to meet present and future competency requirements.*

## TERRITORIAL OIL AND GAS TRAINING COMMITTEE UPDATE

The Committee recently completed its work on the *Oil and Gas Industrial Skills Strategy*. Realizing that a coordinated approach to human resource development is key to ensuring that NWT residents benefit from development, the Territorial Oil and Gas Training Committee has developed a *Northwest Territories Oil and Gas Industrial Skills Strategy*. This Strategy outlines a comprehensive approach to human resource development to ensure that Aboriginals and other Northerners will be able to participate meaningfully in oil and gas development in the Northwest Territories. A copy of the Strategy and a letter requesting funding has been sent to the Honourable Jane Stewart, Minister of Human Resources Development Canada.

## BUSINESS DEVELOPMENT SUBCOMMITTEE UPDATE

The Mackenzie Valley Development Project (MVDP) was set up in 1999 within the Department of RWED to coordinate preparations for oil and gas development in the Northwest Territories. The Business Development Services Subcommittee (BDSS) was one of several groups established under the MVDP to address specific issues related to the oil and gas industry.

The BDSS is currently composed of representatives from various RWED divisions, regional offices, the NWT Development Corporation, the Business Credit Corporation and the Federal Government. The primary focus of this group is to identify and promote sustainable business opportunities related to the proposed Mackenzie Valley pipeline and the exploration of oil and gas in the NWT. A secondary focus involves facilitating dialogue on various pipeline related matters amongst key stakeholders across the NWT.

The Subcommittee has already undertaken several initiatives including a Business Opportunity

Study; an investigation into the availability of business financing in the NWT; feasibility work on the potential for communities along the Mackenzie Valley to use natural gas as an alternative source of fuel; and participation in two Investment Attraction forums in Alberta. Current initiatives include the development of a business inventory registry, community information sessions, a northern business development conference, and the study of joint venture training workshops for delivery next fiscal year.

Businesses servicing the oil and gas sector have unique requirements such as high capital costs and tight work timelines. By identifying and addressing these issues, the BDSS is trying to ensure that northern businesses and communities maximize the economic benefits from oil and gas development in the NWT.

For more information on the Business Development Services Subcommittee, please contact Scott Wray, Investment and Economic Analysis, RWED in Yellowknife at 867-873-7119.

## PIPELINE OPERATIONS TRAINING COMMITTEE—UPDATE

The Pipelines Operations Training Committee (POTC) met in Calgary on December 6, 2002 and in Yellowknife on January 22, 2003.

During the Calgary meeting the POTC reviewed the first draft of the Pipeline Operations Training Strategy. Committee Members provided input that will go towards making the final Strategy comprehensive and informative. A Communications Sub-Committee was struck to produce a plan to promote and inform stakeholders of POTC initiatives. The Committee also discussed the hiring of a Coordinator to assist in the implementation of the Pipeline

Operations Training Strategy. Nona German, the Northern Student Services Advisor for the Northern Student Education Initiative, formally joined the POTC committee at the December meeting. She has since drafted a Student Services Action Plan whereby support mechanisms can be put in place for students and their families.

Much of the January 22, 2003 meeting focused on furthering the communications plan to provide for implementation in February. The plan identifies audiences and goals for consideration when promoting the Pipeline Operations Strategy and the POTC. The

Pipeline Operations Strategy was also discussed. The Committee welcomed Pat Thagard on board as interim Junior Oil and Gas Coordinator. The next meeting of the POTC was set for February 11 & 12, 2003 in Yellowknife.



Cameron Hills  
Photo Courtesy of RWED



## OIL AND GAS EXPLORATION IN THE NWT—WINTER 2003

Thanks to the recent cold weather, oil and gas activities are now in full swing throughout the Mackenzie Valley. Ice roads have been constructed, allowing access to remote sites where camps have been set up and drilling rigs are operating. However, as mentioned in previous newsletters, the 2003 winter season will see a decline in overall exploration levels in comparison to previous years.

2002 was an exceptional year for exploration in the NWT, with over \$350 million being spent and 1500 jobs directly created. For this winter, it is expected that exploration expenditures will be approximately \$200 million. The decline will be most evident in the Inuvik region where expenditures will be down by over 75%. There are many reasons for this fall off, including the natural cycle of exploration activity, budget cutbacks within the industry and uncertainty concerning the proposed Mackenzie Valley Gas Pipeline.

There are some positive developments though as some regions within the western NWT will experience a busy winter. The highlights are noted below:

### Inuvik Region

As mentioned previously, activity levels in the Mackenzie Delta will be noticeably lower this winter. Only two wells are confirmed north of Inuvik - Petro Canada at its Nuna property and Devon Resources at Napartok. Devon and Chevron are also each considering another drilling program in the region. Further south, in the Tsiigehtchic area, Devlan Resources is planning on drilling one new well and re-entering three previous wells.

In terms of seismic activity, Encana will be the only company active. They have planned a 250 km 2D seismic program and a 144 km<sup>2</sup> 3D program north of Inuvik.

### Sahtu Region

In contrast to the Mackenzie Delta, the Sahtu region will experience a significant increase in exploration activity this winter. Over 200 km of winter roads have been constructed and equipment has been transported from Fort Good Hope to drilling locations near Colville Lake. Canadian Natural Resources (CNRL) and Paramount / Apache will drill up to five wells in the Colville Hills and Paramount is also expected to complete 100 km of 2D seismic.

### Deh Cho Region

**Fort Liard** — This is an important exploration season in the Liard Valley as land exploration rights expire after this year. Anadarko is conducting an ambitious program that will see at least six wells drilled on the Arrowhead property approximately 60 km northeast of Fort Liard. The company will also drill a deep well on the west side of the Liard River. Depending on the results, Anadarko is already planning for the construction of a pipeline so that gas from these wells can be transported to northern British Columbia.

Chevron and Canadian Forest Oil will also be drilling one well each this winter near Fort Liard. In total, as much as \$70 million might be spent in the region and 300 jobs created.

**Cameron Hills** — Paramount Resources is continuing with its projects in the Cameron Hills, south of Kakisa near the Alberta-NWT border. Paramount is planning on drilling three new wells and re-completing three existing wells. These new wells will be tied into the existing gathering system so that the gas can be shipped to Alberta through the 15 km pipeline that was constructed last winter.

Paramount is also conducting a 3D seismic program in the Cameron Hills. In addition, a central oil battery will be completed to handle the oil reserves that exist on the property.

## WINTER PROJECTS SUMMARY 2002/2003

### Inuvik Region

Proposer	Nearest Community	2D Seismic	3D Seismic	Drilling	Other Projects	Budget	Direct Employment
Chevron Canada Resources	Tuktoyaktuk (Langley Island)			1 well pending		\$10M	50
EnCana	Tuktoyaktuk (Richards Island)	250 km	144 km <sup>2</sup>			\$12-15M	80
Petro-Canada	Tuktoyaktuk/Inuvik			1 exploratory well		\$20M	50
Devon	Tuktoyaktuk/Inuvik			1 well confirmed 1 well pending		\$20-30M	60
Devlan Exploration	Tsiigehtchic			Re-entering 3 wells 1 well pending	150 km winter road	\$10M	50
<b>TOTALS</b>		<b>250 km</b>	<b>144 km<sup>2</sup></b>	<b>2 wells 3 pending</b>		<b>\$72-85M</b>	<b>290</b>

### Sahtu Region

Proposer	Nearest Community	2D Seismic	3D Seismic	Drilling	Other Projects	Budget	Direct Employment
Paramount Resources	Colville Lake	100 km		1-2 exploratory wells	135 km of access roads	\$10M	100
CNRL	Colville Lake (Lac Belot)			3 exploratory wells	150 km of access roads	\$12M	60
<b>TOTALS</b>		<b>100 km</b>		<b>4-5 wells</b>		<b>\$22M</b>	<b>160</b>

### Deh Cho Region

Proposer	Nearest Community	2D Seismic	3D Seismic	Drilling	Other Projects	Budget	Direct Employment
Anadarko / Paramount	Fort Liard / Nahanni Butte			1 well approved 6-11 wells (Arrowhead) 2 wells (Bovie Lake)		\$30-50M	200
Chevron	Fort Liard			1 well	Install water pipeline	\$10M	50
Canadian Forest Oil	Fort Liard			1 well		\$10M	50
Paramount Resources Ltd.	Cameron Hills	15 km <sup>2</sup>	3 wells		Gathering lines, possible Oil Battery	\$10-12M	120
<b>TOTALS</b>		<b>15 km<sup>2</sup></b>	<b>14-19 wells 3 Re-entries</b>			<b>\$60-82M</b>	<b>420</b>

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CAREER OPPORTUNITIES SERIES

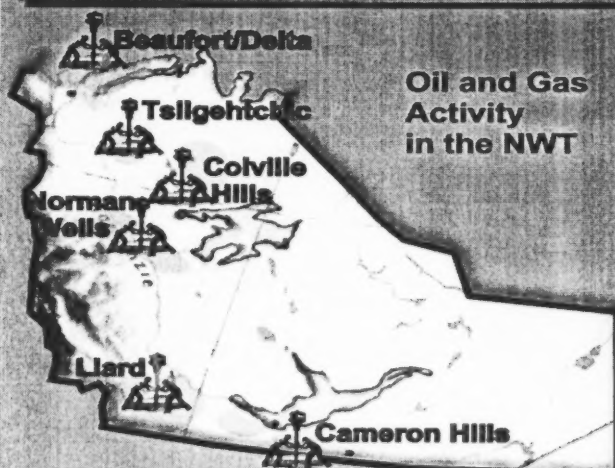
# Jobs in Oil and Gas



The Department of Education, Culture and Employment produces a variety of career development booklets and resources that are available at your local Career Centre or online at [www.ece.gov.nt.ca](http://www.ece.gov.nt.ca).

If you would like copies of the booklet *Jobs in Oil and Gas* or the poster *Jobs in the Oil and Gas Industry*, please contact Krista Rivet at (867) 920-6384 or via email at [krista\\_rivet@gov.nt.ca](mailto:krista_rivet@gov.nt.ca).

## Jobs in the Oil and Gas Industry



### Oil and Gas Activity in the NWT

#### ENTRY LEVEL JOBS

Labourer/Roustabout  
Cook's Helper  
Slasher  
Seismic Driller's Helper  
Electrician's Helper  
Field Assistant  
Janitor  
Mechanic's Helper  
Survey Helper  
Equipment Operator  
Swamper  
Hot Shot Driver

#### APPRENTICESHIP TRADES

Cook  
Mechanic  
Welder  
Electrician  
Plumber  
Carpenter  
Pipefitter

#### SKILLED JOBS

Derrick Hand  
Power Tong Operator  
Motor Hand  
Blaster  
Seismic Driller  
Gauger  
Tank Farm Operator  
Gas Utility Operator  
Compressor Operator  
Control Room Operator

#### OFFICE WORKERS

Office Clerk  
Accounts Clerk  
Secretary  
Purchasing Agent  
Materials Clerk

#### TECHNICAL JOBS

Seismic Recording Technician  
Survey Technician  
Petroleum Technician  
Mechanical Technician  
Geophysical Technician  
Geological Technician

#### SEMI-PROFESSIONAL JOBS

Warehouse Manager  
Camp Manager  
Safety Officer  
Environmental Monitor  
Plant Foreman  
Drilling Foreman

#### PROFESSIONAL JOBS

Geologist  
Petroleum Engineer  
Research Analyst  
Land Surveyor  
Accountant  
Nurse  
Land Agent  
General Manager



Northwest  
Territories Education, Culture & Employment



FOR MORE INFORMATION CONTACT  
The NWT Career Centre located at:  
Fort Smith • Bowengreen Bldg (867) 873-2218  
Hay River • Courthouse Bldg (867) 874-6773  
Fort Simpson • Dale Chis Hall (867) 896-2236  
Yellowknife • Joe Table Bldg (867) 786-6100  
Inuvik • 3 Burger St. (867) 876-7223  
Norman Wells •  
Shrine Reg. Council (867) 567-2085



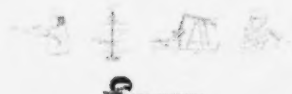
CARTER OPPORTUNITIES STATES...

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Seismic Recording Technician  
Survey Technician  
Petroleum Technician  
Mechanical Technician  
Geophysical Technician  
Geological Technician

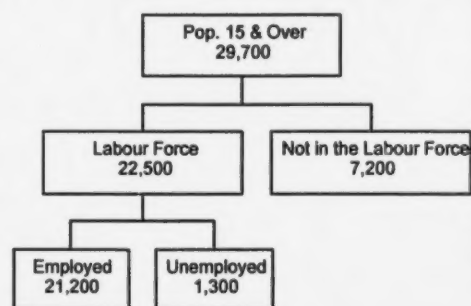


Education, Culture & Employment



**FOR MORE INFORMATION CONTACT:**  
The RWIT Center Centers located at:  
For South - New Orleans (504) 872-7271  
New York - New York (212) 674-6773  
For Midwest - San Francisco (415) 882-7226  
Vancouver - Vancouver (604) 754-6100  
Seattle - Seattle (206) 429-7822  
Houston - Houston (713) 641-2200  
Shreveport - Shreveport (504) 841-2200

## NWT LABOUR FORCE ACTIVITY – DECEMBER 2002



For December 2002, Statistics Canada estimates that of the 29,700 residents 15 years of age and older in the Northwest Territories, some 21,200 persons were employed. This represents an overall employment rate of 71.4%. Overall, NWT employment increased by 200 between November 2002 and December 2002.

For December, there were some 1,300 persons who were unemployed in the Northwest Territories, which is a decrease of 100 from November. The overall NWT unemployment rate stood at 5.8% for December. This compares with the unemployment rate for Canada of 7.1% in December.

On an annual basis, 2002 continued the strong performance of the labour market. Unemployment averaged about 500 lower than 2001, with an average unemployment rate of 6.5% for 2002. The average employment rate for the Northwest Territories was 71.0%, compared with 69.5% in 2001. The Canadian employment rate averaged 61.8% for 2002. The NWT employment rate was again best in Canada in 2002, with Alberta and Yukon next at 69.1%. Newfoundland's employment rate was lowest among provinces and territories at 48.7%.

Source: NWT Bureau of Statistics. *Labour Force Activity—December 2002*

### NORTHWEST TERRITORIES LABOUR FORCE ACTIVITY

	Population 15 & Over	Labour Force	Employed	Unem- ployed	Not in the Labour Force	Partic- ipation Rate	Unemp- loyment Rate	Empley- ment Rate
Dec-02	29,700	22,500	21,200	1,300	7,200	75.8	5.8	71.4
Nov-02	29,700	22,400	21,000	1,400	7,300	75.4	6.3	70.7
Oct-02	29,600	23,100	21,600	1,500	6,600	78.0	6.5	73.0
Sep-02	29,500	23,000	21,600	1,400	6,600	78.0	6.1	73.2
Aug-02	29,500	23,000	21,700	1,300	6,500	78.0	5.7	73.6
Jul-02	29,400	22,500	21,300	1,200	6,900	76.5	5.3	72.4

Source: NWT Bureau of Statistics. *Labour Force Activity—December 2002*

For more information, visit: [www.stats.gov.nt.ca](http://www.stats.gov.nt.ca)

### REGIONAL CONTACTS

#### Career Centres and Canada-NWT Service Centres Education, Culture and Employment

Fort Simpson (Deh Cho Hall)	695-7334
Fort Smith (Sweetgrass Building)	872-7217
Hay River (Courthouse Building)	874-9200
Inuvik (1st Floor Perry Building)	777-7323
Norman Wells (Government Building)	587-2566
Yellowknife (Joe Tobie Building)	766-5100

#### Resources, Wildlife and Economic Development

Hay River	874-6702
Fort Simpson	695-2231
Fort Smith	872-6400
Inuvik	777-7102
Norman Wells	587-3503
Fort Liard	770-4300
Yellowknife (Scotia Centre)	920-8691



#### Comments or Questions? Contact...

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